Money Isn't All You're Saving

Improve Energy Efficiency with Advanced Wall Insulation Techniques

Builder Guide

DESCRIPTION

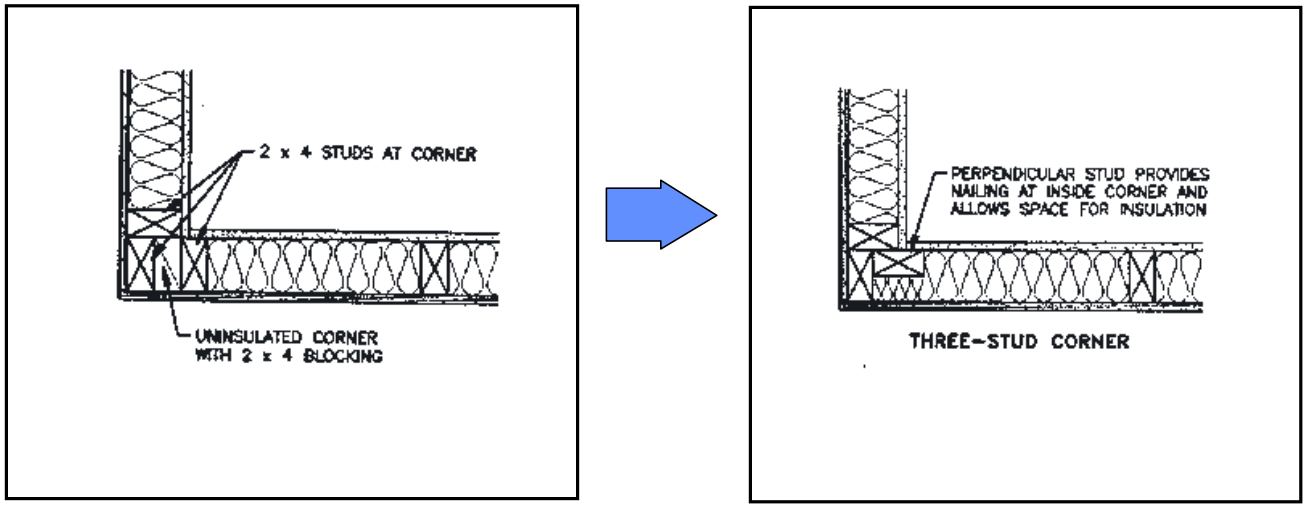
Advanced wall insulation techniques can significantly reduce the amount of energy a house consumes with little additional effort. Two key practices are required to maximize insulation effectiveness: 1) adopt framing techniques that eliminate uninsulated wall sections - such as corners and headers; and 2) fill insulation cavities entirely leaving no gaps where convection currents can form. The following examples illustrate advanced techniques for installing insulation in typical trouble spots.

BENEFITS

- ❑ Providing comfortable energy efficient houses with lower utility bills will increase customer satisfaction, reduce callbacks, and increase referrals.
- ❑ When you provide a potential home buyer with a more desirable product, closing the sale is easier.

❑ Three-Stud Corners Increase Insulation Coverage

Three-stud corners provide solid nailing for drywall yet do not leave pockets that can't be insulated after exterior sheathing is installed.

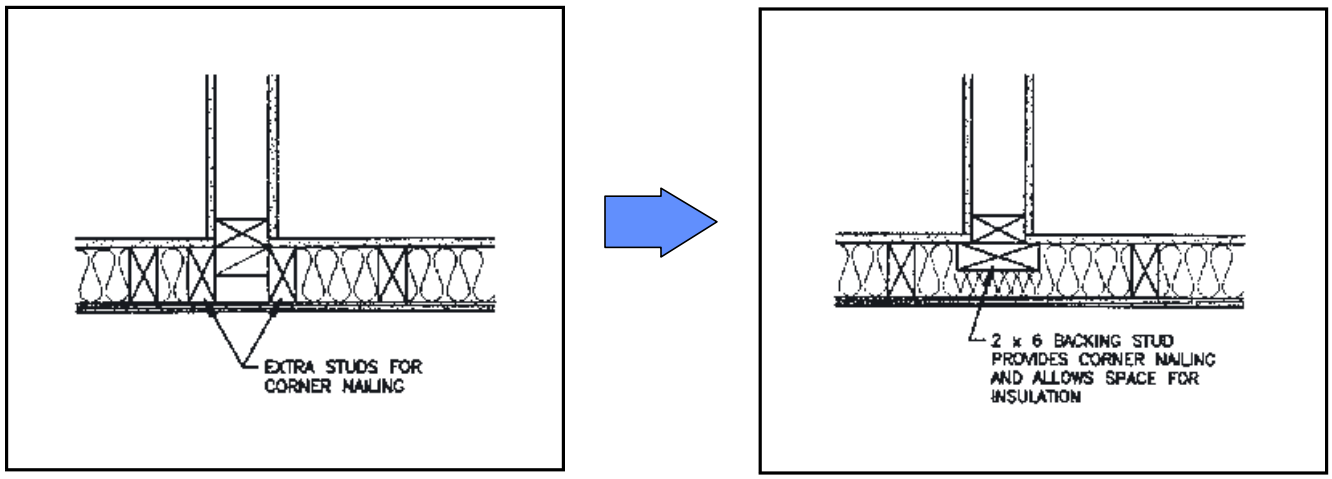


Typical Construction

Preferred Construction

❑ Improved Framing at Interior Walls Junctions

The usual practice of adding extra studs in the exterior wall to provide nailing for drywall creates an unaccessible pocket that can't be insulated after exterior sheathing is installed. Replacing the extra studs with a 2x6 still provides the nailing surface and allows for plenty of insulation behind.



Typical Construction

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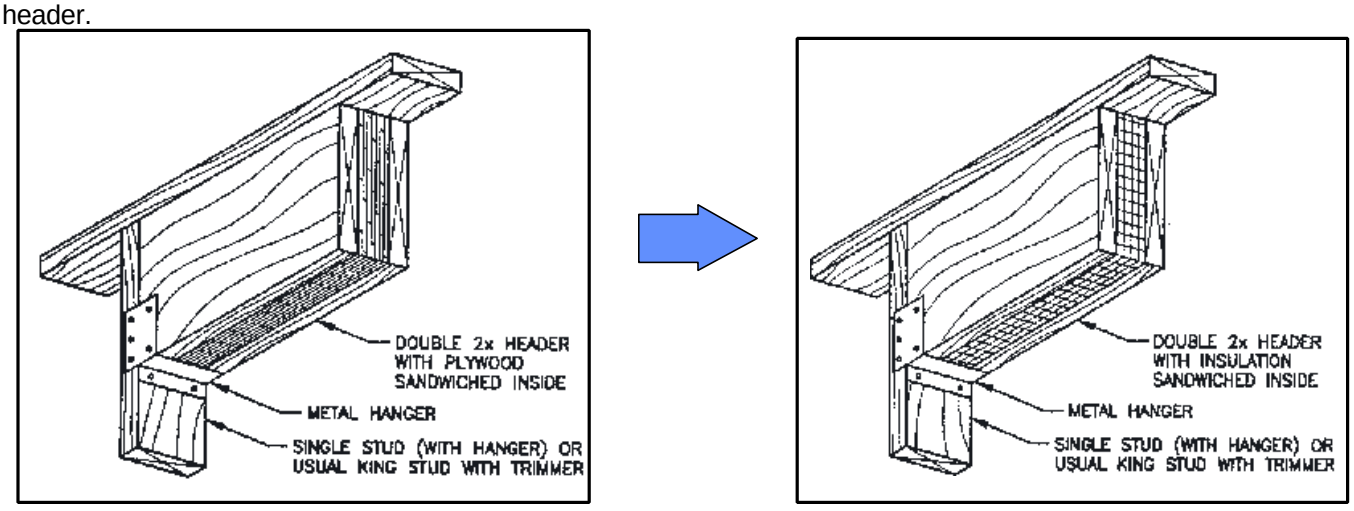
❑ Insulated Header Details

A surprisingly large area of the typical building envelope, as much as 4 percent, consists of window and door headers. A header with 2½" of extruded polystyrene foam insulation has 2.4 times the R-value of a solid wood header.



Typical Construction

Preferred Construction

RESOURCES

- ❑ *Super Good Cents Builder's Field Guide* (Bonneville Power Association), 1992. Available at 206-216-4272.
- ❑ *NY Star Builder's Field Guide* (NY Star, Inc.), 1994. Available at 518-465-3115.
- ❑ *Canadian Home Builder's Association Builder's Manual*, 1994. Available at 1-800-346-0104.